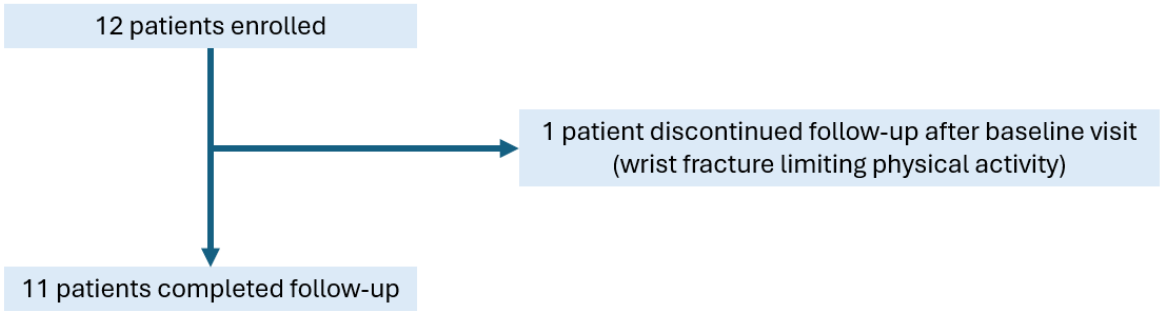
Participant flow



Baseline characteristics

Characteristic	Value
Female sex: n/N (%)	6/11 (55)
Age (years): median (IQR) [range]	75 (70-76.5) [47-90]
Height (m): median (IQR) [range]	1.70 (1.60-1.76) [1.54-1.82]
Weight (kg): median (IQR) [range]	72.8 (62.4-79.4) [57.5-97.0]
BMI: median (IQR) [range]	25.4 (24.3-26.7) [21.2-32.0]
Months since diagnosis: median (IQR) [range]	5 (2.5-15.5) [1-336]
Rheumatoid factor positive: n (%)	8 (73)
ACPA positive: n (%)	7 (64)
Rheumatoid factor and ACPA double positive: n (%)	7 (64)
Current DMARD therapy: n (%)	
Methotrexate	8 (64)
Sulfasalazine	4 (36)
Hydroxychloroquine	3 (27)
Leflunomide	2 (18)
Adalimumab	1 (9)

ACPA: anti-citrullinated peptide antibody; BMI: body mass index; DMARD: disease-modifying anti-rheumatic drug

Primary outcome measures

Outcome measure	Value
Disease activity score in 28 joints with C-reactive protein (DAS28-CRP): median (IQR) [range]	
Baseline	2.48 (2.00-3.64) [1.22-6.55]
Week 4	2.39 (1.65-2.94) [1.25-3.96]
Week 8	2.06 (1.56-2.53) [0.97-4.19]
Week 12	2.10 (1.63-3.10) [1.10-4.27]
Rheumatoid arthritis disease activity index 5 (RADAI-5): median (IQR) [range]	
Baseline	4.2 (2.2-5.8) [1.6-7.4]
Week 4	2.4 (1.8-3.2) [0.8-5.8]
Week 8	2.4 (2.0-3.6) [1.6-4.8]
Week 12	2.6 (2.4-2.8) [0.6-5.2]

Adverse events

Serious adverse events (SAE)

Nature of SAE	**Expected**	**Relationship to study protocol procedures**
Wrist fracture	No	Unrelated
Acute appendicitis requiring appendicectomy	No	Unrelated

Non-serious adverse events

Nature of adverse event (MedDRA organ class)	**Number of adverse events**	**Number of adverse events related to study protocol procedures**
Infections and infestations	2	0
Blood and lymphatic system disorders	1	0
Metabolism and nutrition disorders	1	0
Gastrointestinal disorders	3	0
Skin and subcutaneous tissue disorders	3	2*
Surgical and medical procedures	1	0

* Includes 1 episode of skin rash (1 participant) and one episode of skin itching (1 participant) at site of VitalPatch application